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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,436	06/30/2000	Eiji Muramatsu	Q59947	9744

7590

11/06/2002

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EXAMINER

FERGUSON, LAWRENCE D

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 11/06/2002

14

Please find below and/or attached an Office communication concerning this application or proceeding.

AS14

Office Action Summary	Application No.		Applicant(s)	
	09/608,436		MURAMATSU ET AL.	
	Examiner		Art Unit	
	Lawrence D Ferguson		1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment mailed August 08, 2002.

Claims 7-13 were added rendering claims 2-13 are pending.

Claim Rejections – 35 USC 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2-6, 9-11 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In claims 2-4 and 9-11, “substantially” is a relative term and therefore indefinite.

b. In claim 9, the phrase, ‘equals a thickness said second grooves’ is indefinite because it is improper claim language. Examiner suggests changing to ‘equals a thickness of said second grooves.’

c. In claim 10, the phrase, ‘equals a thickness said second lands’ is indefinite because it is improper claim language. Examiner suggests changing to ‘equals a thickness of said second lands.’

d. In claim 11, the phrase, ‘equals a thickness said second grooves’ and ‘equals a thickness said second lands’ is indefinite because it is improper claim language.

Examiner suggests changing to 'equals a thickness of said second grooves' and 'equals a thickness of said second lands.'

Claim Rejections – 35 USC § 103(a)

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (U.S. 5,881,032) in view of Hirata et al (U.S. 5,242,729).

6. Ito teaches a string of pits and lands formed in a transparent substrate, which is coated to form each recording layer, where a transparent resin is injected between the first and second recording layers (column 2, lines 24-27). Coating is analogous to laminating. Ito further teaches the coated aluminum layer reflects light (column 2, lines 25-31). Ito discloses an information storage medium comprising plural recording layers wherein the spiral reproduction directions are opposite on different layers assigned to sectors at the same radial positions on different layers having a complementary relationship (column 4, lines 41-46). Ito discloses an information storage media in which the data recording grooves are formed on the first and second recording layers (column 9, lines 56-65) along with elevated and retracted grooves in Figure 12. Ito does not disclose where the grooves are thicker than the lands.

Hirata teaches a recording medium having a recording layer and a transparent substrate (column 3, lines 24-28) where the recording layer has thicker grooves than lands (column 11, lines 5-9). Ito and Hirata are analogous because they are both from the field of recording mediums. It would have been obvious to one of ordinary skill in the art to include thicker grooves than lands in the recording mediums of Ito because Hirata teaches thicker grooves and less thick lands help produce the proper reflectivity to provide reproduction in accordance with the CD standard (column 11, lines 5-9).

Response to Arguments

7. Applicant's remarks to the rejection made under 35 USC 112, second paragraph have been considered but are unpersuasive. Applicant disagrees that the term "substantially" renders the claims indefinite. Applicant argues the Court of Appeals for the Federal Circuit has often stated that terms such as "substantially equal" do not render a claim indefinite, as long as "one of ordinary skill in the art would understand what is claimed...in light of the specification" even if experimentation may be needed. *Andrew Corp. V. Gabriel Electronics, Inc.*, 847 F.2d 819, 6 USPQ2d 2010 (Fed. Cir. 1988). Examiner disagrees because *Andrew Corp. v. Gabriel Electronics, Inc.* is directed to *substantially* increase the efficiency of the compound as a copper extractant in view of the general guidelines contained in the specification. The cited case law is irrelevant because Applicant's instant specification does not show one of ordinary skill in the art the degrees of thickness. The claim language is misleading and one of ordinary

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skill in the art would not clearly understand whether the grooves in the first recording layer are or are not of the same thickness as the grooves in the second recording layer. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. When a term of degree is presented in a claim, first a determination is to be made as to whether the specification provides some standard for measuring that degree. If it does not, a determination is made as to whether one of ordinary skill in the art, in view of the prior art and the status of the art, would be nevertheless reasonably apprised of the scope of the invention. Even if the specification uses the same term of degree as in the claim, a rejection may be proper if the scope of the term is not understood when read in light of the specification. While, as a general proposition, broadening modifiers are standard tools in claim drafting in order to avoid reliance on the doctrine of equivalents in infringement actions, when the scope of the claim is unclear a rejection under 35 U.S.C. 112, second paragraph is proper. See *In re Wiggins*, 488 F. 2d 538, 541, 179 USPQ 421, 423 (CCPA 1973). Additionally, a substantial portion was held to be indefinite because the specification lacked some standard for measuring the degree intended and, therefore, properly rejected as indefinite under 35 U.S.C. 112, second paragraph. *Ex parte Oetiker*, 23 USPQ2d 1641 (Bd. Pat. App. & Inter. 1992).

Applicant's remarks to the rejection made under 35 USC 103(a) as being unpatentable over Ito et al. U.S. (5,881,032) are considered moot based on grounds of new rejection.

Conclusion

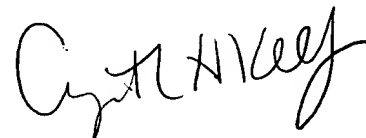
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



Lawrence D. Ferguson
Examiner
Art Unit 1774

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SUPERVISORY PATENT EXAMINER
CYNTHIA H. KELLY



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